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# TRANSMITTAL FORM

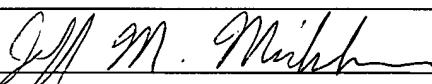
(to be used for all correspondence after initial filing)

Application Number	09/739,168
Filing Date	December 18, 2000
First Named Inventor	Budge et al.
Group Art Unit	2621
Examiner Name	H. Akhavannik
Attorney Docket Number	1423-4202.1US

## ENCLOSURES (check all that apply)

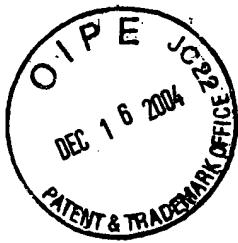
<input checked="" type="checkbox"/> Postcard receipt acknowledgment (attached to the front of this transmittal)  <input checked="" type="checkbox"/> Duplicate copy of this transmittal sheet in the event that additional filing fees are required under 37 C.F.R. § 1.16  <input type="checkbox"/> Preliminary Amendment  <input type="checkbox"/> Response to Restriction Requirement/Election of Species Requirement dated  <input checked="" type="checkbox"/> Amendment in response to office action dated June 16, 2004  <input type="checkbox"/> Amendment under 37 C.F.R. § 1.116 in response to final office action dated  <input checked="" type="checkbox"/> Additional claims fee - Check No. 7142 in the amount of \$100.00  <input type="checkbox"/> Letter to Chief Draftsman and copy of FIGS. with changes made in red  <input type="checkbox"/> Transmittal of Formal Drawings  <input type="checkbox"/> Formal Drawings ( sheets)	<input type="checkbox"/> Information Disclosure Statement, PTO/SB/08A; <input type="checkbox"/> copy of cited references  <input checked="" type="checkbox"/> Supplemental Information Disclosure Statement; PTO/SB/08A; copy of cited references and Check No. 7133 in the amount of \$180.00  <input type="checkbox"/> Associate Power of Attorney  <input checked="" type="checkbox"/> Petition for Extension of Time and Check No. 7141 in the amount of \$510.00  <input type="checkbox"/> Petition  <input type="checkbox"/> Fee Transmittal Form  <input type="checkbox"/> Certified Copy of Priority Document(s)  <input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Other Enclosure(s) (please identify below):
	Remarks	The Commissioner is authorized to charge any additional fees required but not submitted with any document or request requiring fee payment under 37 C.F.R. §§ 1.16 and 1.17 to Deposit Account 20-1469 during pendency of this application.

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Jeff M. Michelsen	Registration No. 50,978
Signature		
Date	December 16, 2004	

## CERTIFICATE OF MAILING

Express Mail Label Number: EL 994822268 USDate of Deposit: December 16, 2004Person Making Deposit: Steve Wong



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**In re Application of:**

Budge et al.

**Serial No.:** 09/739,168

**Filed:** December 18, 2000

**For:** METHOD FOR IMAGING CODING  
BY RATE-DISTORTION ADAPTIVE  
ZERO-TREE-BASED RESIDUAL VECTOR  
QUANTIZATION AND SYSTEM FOR  
EFFECTING SAME

**Confirmation No.:** 3993

**Examiner:** H. Akhavannik

**Group Art Unit:** 2621

**Attorney Docket No.:** 1423-4202.1US

NOTICE OF EXPRESS MAILING

Express Mail Mailing Label Number: EL 994822268 US

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**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 or PTO/SB/08 be considered by the Examiner and made of record. Copies of the listed documents are enclosed pursuant to 37 C.F.R. § 1.98(a).

In accordance with 37 C.F.R. § 1.97(g) and (h), filing of this Information Disclosure Statement is not to be construed as a representation that a search has been made or an admission

that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b). Further, no representation is made by Applicants herein that no other possible material information as defined in 37 C.F.R. § 1.56 (b) exists.

U.S. Patent Documents

<u>U.S. Patent No.</u>	<u>Publication Date</u>	<u>Patentee</u>
US - 6,134,350	10-17-2000	Beck
US - 6,236,757 B1	05-22-2001	Zeng et al.

Other Documents

M. ANTONINI ET AL., "Image Coding using wavelet transform", IEEE Transactions on Image Processing, vol. 1, no. 2, pp. 205-220

J.M. SHAPRIO, "Embedded image coding using zerotree of wavelet coefficients," IEEE Transactions on Signal Processing, vol. 41, pp. 3445-3462, December 1993

P.C. COSSMAN ET AL., "Tree-Structured vector quantizaation with significance map for wavelet image coding", Proc. 1995 IEEE Data Compression Conf. (DCC), March 1995

A.R. CALDERBANK ET AL., "Wavelet transforms that map integers to integers", Mathematics Subject Classification, August 1996

M.J. GORMISH ET AL., "Lossless and nearly lossless compression for high quality images", Tech. Rep. Ricoh California Research Center, 2882 Sand Hill Road, Suite 115, Menlo Park, CA 94025-7022

QUN GU, "Image Coding by Rate-Distortion Adaptive Zerotree-based Residual Vector Quantization (2000) (published Master of Science (M.S.) thesis, Utah State University, Logan, Utah on file with the Utah State University Library)

I. DEBAUCHIES ET AL., "Factoring wavelet transform into lifting steps", Tech. Rep. Lucent, Bell Laboratories, 1996

D. SAMPSON ET AL., "Wavelet transform image coding using lattice vector quantization", Electronics Letter, vol. 30, pp. 1477-78, September 1994

Applicants offer to supply any explanation or discussion of the documents which the Examiner feels is necessary or desirable and which is requested.

This Information Disclosure Statement is filed after the mailing date of the first Office Action on the merits.

The fee pursuant to 37 C.F.R. § 1.17(p) is enclosed.

Respectfully submitted,



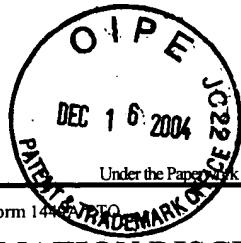
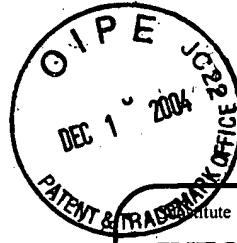
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Date: December 16, 2004

JMM/rmh

Enclosures: Form PTO-1449 or PTO/SB/08  
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## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(use as many sheets as necessary)*

Shee

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of 2

***Complete if Known***

Application Number	09/739,168
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Examiner Name	H. Akhavannik
Attorney Docket Number	1423-4202.1US

## **U.S. PATENT DOCUMENTS**

## FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449A/PTO				<i>Complete if Known</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		Application Number		09/739,168	
		Filing Date		December 18, 2000	
		First Named Inventor		Budge et al.	
		Group Art Unit		2621	
		Examiner Name		H. Akhavannik	
Sheet	2	of	2	Attorney Docket Number	1423-4202.1US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
		M. ANTONINI ET AL., "Image Coding using wavelet transform", IEEE Transactions on Image Processing, vol. 1, no. 2, pp. 205-220		
		J.M. SHAPRIO, "Embedded image coding using zerotree of wavelet coefficients," IEEE Transactions on Signal Processing, vol. 41, pp. 3445-3462, December 1993		
		P.C. COSSMAN ET AL., "Tree-Structured vector quantizaation with significance map for wavelet image coding", Proc. 1995 IEEE Data Compression Conf. (DCC), March 1995		
		A.R. CALDERBANK ET AL., "Wavelet transforms that map integers to integers", Mathematics Subject Classification, August 1996		
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		I. DEBAUCHIES ET AL., "Factoring wavelet transform into lifting steps", Tech. Rep. Lucent, Bell Laboratories, 1996		
		D. SAMPSON ET AL., "Wavelet transform image coding using lattice vector quantization", Electronics Letter, vol. 30, pp. 1477-78, September 1994		

Examiner Signature		Date Considered	
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<sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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